

We claim:

1. A process for finishing a fabric comprising the steps of:
  - applying a softener to one face of a fabric such that the softener is substantially isolated on the face to which it is applied; and
- 5 applying a durable press resin to the opposite face of the fabric such that the resin is substantially isolated on the face to which it is applied, and drying the fabric, to thereby form a fabric having good durable press and hand characteristics.
- 10 2. The process according to Claim 1, wherein said fabric comprises cellulosic fibers.
- 15 3. The process according to Claim 2, wherein said fabric comprises at least 50% cellulosic fibers.
4. The process according to Claim 2, wherein said fabric comprises at least 65% cellulosic fibers.
- 20 5. The process according to Claim 2, wherein said fabric comprises at least 85% cellulosic fibers.
6. The process according to Claim 2, wherein said fabric comprises substantially all cellulosic fibers.
- 25 7. The process according to Claim 1, wherein said step of applying a softener to one side of the fabric is performed by a foam application method.
8. The process according to Claim 1, wherein said step of applying a softener to one face of the fabric is performed by a method selected from the 30 group consisting of foam application, spraying, and kiss roll application.

9. The process according to Claim 1, wherein said step of applying a durable press resin to the opposite face of the fabric is performed by a method selected from the group consisting of foam application, spraying, and kiss roll application.

5 10. The process according to Claim 1, wherein said steps of applying a softener to one face and a durable press resin to the opposite face of the fabric are performed by a foam application method.

10 11. The process according to Claim 1, wherein said steps of applying a softener to one face of the fabric and a durable press resin to the opposite face of the fabric are performed substantially simultaneously.

15 12. The process according to Claim 1, wherein said step of applying a durable press resin to the opposite face of the fabric is performed on the fabric back.

13. The process according to Claim 1, further comprising the step of curing the durable press resin.

20 14. The process according to Claim 13, wherein said step of curing is performed at substantially the same time as said step of drying.

15. The process according to Claim 1, further comprising the step of face finishing the fabric prior to applying the softener and durable press resin.

25 16. A process for finishing a cellulosic-fiber containing fabric comprising the steps of:  
applying a softener to the face of a cellulosic fiber-containing fabric by a foam application method such that the softener is substantially isolated on the face of the fabric; and

applying a durable press resin to the back of said fabric by a foam application method such that the resin is substantially isolated on the fabric back; and

5 drying the fabric, to thereby form a fabric having good durable press and hand characteristics.

17. A process according to Claim 16, wherein said cellulosic fiber-containing fabric comprises at least about 50% cellulosic fibers.

10 18. A process according to Claim 17, wherein said cellulosic fiber-containing fabric comprises at least about 65% cellulosic fibers.

19. A process according to Claim 17, wherein said cellulosic fiber-containing fabric comprises at least about 85% cellulosic fibers.

15 20. A process according to Claim 17, wherein said cellulosic fiber-containing fabric comprises substantially all cellulosic fibers.

20 21. A process according to Claim 20, wherein said steps of applying a softener, applying a durable press resin and drying the fabric are performed to achieve a fabric having an Appearance Rating of at least about 4.0 and a Drape Value of at least about 307.

25 22. A process according to Claim 16, wherein said steps of applying a softener and applying a durable press resin are performed substantially simultaneously.

23. A cellulosic-fiber containing fabric having first and second faces, said fabric having a softener substantially isolated on its first face and a durable-press 30 resin substantially isolated on its second face.

24. A fabric according to Claim 23, wherein said second face comprises the back of the fabric.

25. A fabric according to Claim 24, wherein said fabric comprises a plurality of 5 interwoven warp and filling yarns, and said filling yarns are predominant on said back surface.

26. A fabric according to Claim 23, wherein said first face comprises the face of the fabric.

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27. A fabric according to Claim 23, wherein said softener comprises at least about 6% owf.

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28. A fabric according to Claim 23, wherein said durable press resin comprises at least about 5% owf.

29. A fabric according to Claim 23, wherein said fabric is selected from the group consisting of woven fabrics, knit fabrics, and nonwoven fabrics.

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30. A cellulosic-fiber containing fabric having front and back surfaces, said fabric having a durable-press resin substantially isolated on only one of said front and back surfaces, and a softener applied to at least the other of the front and back surfaces.

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31. A fabric according to Claim 30, wherein both of said front and back surfaces comprise a softener.

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32. A woven, substantially all-cotton fabric having a durable press resin thereon to impart wrinkle-resistant properties, said fabric having a Kawabata System Mean Bending Stiffness of about 0.42 or greater and a Residual Bending Curvature @  $0.5 \text{ cm}^{-1}$  value of about 0.75 or less.

33. A fabric according to claim 32, wherein said fabric has a Flat-Dry Appearance Rating of at least about 2 when tested according to AATCC Test Method 124-1996.

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34. A fabric according to Claim 33, wherein said fabric has a Flat-Dry Appearance Rating of at least about 3.

35. A fabric according to Claim 34, wherein said fabric has a Flat-Dry

10 Appearance Rating of at least about 4.

36. A fabric according to Claim 32, wherein the durable press resin is applied at a level of at least about 5% owf.

15 37. A fabric according to Claim 36, wherein the durable press resin is applied at a level of at least about 9% owf.

38. A fabric according to Claim 32, wherein said fabric has a Kawabata System MIU value of about 0.178 or less.

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39. A fabric according to Claim 32, wherein said fabric has a Drape value of about 300 or greater.

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40. A woven, substantially all-cotton fabric having a Kawabata System DenMax Value of about 0.565 or greater and a MIU of about 0.190 or less.

41. A fabric according to Claim 40, wherein said fabric has a Kawabata System RC value of about 43 or greater.

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42. A fabric according to Claim 41, wherein said fabric has a Kawabata System RC value of about 45 or greater.

43. A fabric according to Claim 42, wherein said fabric has a Kawabata System RC value of about 48 or greater.

5 44. A woven, substantially all-cotton fabric having a DenMax of about 0.565 or greater and a Drape Value of about 300 or greater.

45. A woven, substantially all-cotton fabric having a Kawabata System RC value of about 48 or greater and a Tmin of about 0.76 or less.

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46. A fabric according to Claim 45, wherein said fabric comprises a durable press resin.

47. A fabric according to Claim 46, wherein said durable press resin is present

15 on said fabric at a level of about 5% owf or greater.

48. A woven, substantially all-cotton fabric having a Kawabata system Tmin of about 0.76 or less and a B of about 0.415 or greater.

20 49. A fabric according to Claim 48, wherein said fabric has a Tmin of about 0.74 or less.

50. A fabric according to Claim 48 wherein said fabric has a B of about 0.45 or greater.

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51. A woven, substantially all-cotton fabric having a Kawabata system mean Shear Stiffness value of about 3.25 or greater and an RG05 of about 1.5 or less.

52. A fabric according to Claim 51, wherein said fabric comprises at least 30 about 9% durable press resin owf.

53. A fabric according to Claim 51, wherein said fabric has an RG05 value of about 1.3 or less.

54. A fabric according to Claim 51, wherein said fabric has a mean Shear Stiffness value of about 3.5 or greater.

55. A fabric according to Claim 51, wherein said fabric has a mean Shear Stiffness value of about 3.7 or greater.

10 56. A woven, substantially all-cotton fabric having a Kawabata System mean Shear Stiffness of about 3.25 or greater and an RG25 of about 2.8 or less.

57. A fabric according to Claim 56, wherein said fabric has an RG25 value of about 2.5 or less.

15 58. A fabric according to Claim 56, wherein said fabric has a mean Shear Stiffness of about 3.5 or greater.

20 59. A woven, substantially all-cotton fabric having a Kawabata System mean Shear Stiffness of about 3.25 or greater and an RG50 of about 4.2 or less.

60. A fabric according to Claim 59, wherein said fabric has an RG50 value of about 4 or less.

25 61. A fabric according to Claim 59, wherein said fabric has an RG50 value of about 3.6 or less.

62. A fabric according to Claim 59, wherein said fabric has a Shear Stiffness of about 3.5 or greater.

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63. A woven, substantially all-cotton fabric having an initial, as-produced Drape Value, wherein said Drape Value decreases from the intial drape after 5 Home Launderings according to AATCC Standardized Home Laundry Test Conditions, Designation 3, (1995).

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64. A fabric according to Claim 63, wherein said initial drape is at least about 300.

65. A fabric according to Claim 64, wherein said Drape Value after 5 Home

10 Launderings is about 272 or lower.

66. A fabric according to Claim 63, wherein said fabric has a weight of about 8 oz/sq yard.

15 67. A durable press resin-treated substantially all-cotton woven fabric having a MIU of about 0.178 or less.

68. A fabric according to Claim 67, wherein said fabric has a MIU of about 0.175 or less.

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69. A fabric according to Claim 67, wherein said fabric has a Flat-Dry Appearance of about 2 or greater.

25 70. A fabric according to Claim 69, wherein said fabric has a Flat-Dry appearance of about 3 or greater.

71. A fabric according to Claim 70, wherein said fabric has a Flat-Dry Appearance of about 3.5 or greater.

30 72. A woven, substantially all-cotton fabric having a B of about .515 or greater and a MIU of about .25 or less.

73. A fabric according to Claim 72, wherein said MIU is about 0.2 or less.
74. A fabric according to Claim 72, wherein said MIU is about 0.18 or less.

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75. A fabric according to Claim 72, wherein said fabric has a B of about .517 or greater.

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